



\*\*FILE\*\* ID\*\*CRFMACROS

19

DEF

MNB

• = 0

MAB

MAB  
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MAB  
MAB  
MAB

• M  
•  
• = 0

CCCCCCCC	RRRRRRRR	FFFFFFFF	MM	MM	AAAAAA	CCCCCCCC	RRRRRRRR	000000	SSSSSS			
CCCCCCCC	RRRRRRRR	FFFFFFFF	MM	MM	AAAAAA	CCCCCCCC	RRRRRRRR	000000	SSSSSS			
CC	RR	RR	FF	MMMM	MMMM	AA	CC	RR	RR	00	00	SS
CC	RR	RR	FF	MMMM	MMMM	AA	CC	RR	RR	00	00	SS
CC	RR	RR	FF	MM	MM	AA	CC	RR	RR	00	00	SS
CC	RR	RR	FF	MM	MM	AA	CC	RR	RR	00	00	SS
CC	RRRRRRRR	FFFFFFFF	MM	MM	AA	AA	CC	RRRRRRRR	00	00	SSSSSS	
CC	RRRRRRRR	FFFFFFFF	MM	MM	AA	AA	CC	RRRRRRRR	00	00	SSSSSS	
CC	RR	RR	FF	MM	MM	AAAAAA	CC	RR	RR	00	00	SS
CC	RR	RR	FF	MM	MM	AAAAAA	CC	RR	RR	00	00	SS
CC	RR	RR	FF	MM	MM	AA	CC	RR	RR	00	00	SS
CC	RR	RR	FF	MM	MM	AA	CC	RR	RR	00	00	SS
CCCCCCCC	RR	RR	FF	MM	MM	AA	CCCCCCCC	RR	RR	000000	SSSSSS	
CCCCCCCC	RR	RR	FF	MM	MM	AA	CCCCCCCC	RR	RR	000000	SSSSSS	

MM MM AAAAAA RRRRRRRR  
MM MM AAAAAA RRRRRRRR  
MMMM MM MM AA AA RR RR  
MMMM MM MM AA AA RR RR  
MM MM MM AA AA RR RR  
MM MM MM AA AA RR RR  
MM MM AA AA RR RRRRRRRR  
MM MM AA AA RR RR  
MM MM AAAAAAAA RR RR  
MM MM AAAAAAAA RR RR  
MM MM AA AA RR RR

.TITLE CRF MACROS  
.IDENT 'V04-000'

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**FACILITY: CROSS REFERENCE PROGRAM**

**ABSTRACT:** ACCEPTS CROSS REFERENCE DATA AND PRODUCES A SUMMARY

ENVIRONMENT: LINKABLE IMAGE TO BE USED WITH THE NATIVE MODE LINKER AND COMPILERS

AUTHOR: K.D. MORSE , CREATION DATE: 12-APR-77

MODIFIED BY:

01 . : VERSION

0

.SBTTL DECLARATIONS

:: INCLUDE FILES:

:: MACROS:

:: MACRO TO INITIALIZE THE OUTPUT LINE DESCRIPTION TABLE

:: \$CRFCONTROLTBL OUT\_RTN,ERR\_RTN,KEY\_TYPE,KEY1TABLE,KEY2TABLE,-  
VAL1TABLE,VAL2TABLE,REF1TABLE,REF2TABLE

:: WHERE

ERR\_RTN = ADDRESS OF USER'S ERROR ROUTINE  
OUT\_RTN = ADDRESS OF USER'S OUTPUT ROUTINE  
KEY\_TYPE = TYPE OF KEY. 0=ASCII, 1=BINARY LONGWORD  
KEY1TABLE = ADDRESS OF KEY1 FIELD DESCRIPTION TABLE  
KEY2TABLE = ADDRESS OF KEY2 FIELD DESCRIPTION TABLE  
VAL1TABLE = ADDRESS OF VAL1 FIELD DESCRIPTION TABLE  
VAL2TABLE = ADDRESS OF VAL2 FIELD DESCRIPTION TABLE  
REF1TABLE = ADDRESS OF REF1 FIELD DESCRIPTION TABLE  
REF2TABLE = ADDRESS OF REF2 FIELD DESCRIPTION TABLE

.MACRO \$CRFCONTROLTBL OUT\_RTN,ERR\_RTN,KEY\_TYPE=0,KEY1TABLE,-  
KEY2TABLE,VAL1TABLE,VAL2TABLE,REF1TABLE,-  
REF2TABLE

.LONG 0	: TREE LISTHEAD-ROOT
.WORD CRFSK_ENTSIZE	: SIZE OF ONE CRF ENTRY
.WORD CRFSK_NODSIZE	: SIZE OF ONE CRF NODE
.BYTE KEY_TYPE	: TYPE OF KEY
.BYTE 0	: CRF FLAGS
.WORD 0	: SECONDARY ERROR STATUS CODE
.LONG ERR_RTN	: ADDR OF ERROR ROUTINE
.LONG OUT_RTN	: ADDR OF OUTPUT ROUTINE
.LONG	: ADDRESSES OF FIELD DESCRIPTIONS
KEY1TABLE	: KEY1 FIELD DESCRIPTIONS
KEY2TABLE	: KEY2 FIELD DESCRIPTIONS
VAL1TABLE	: VAL1 FIELD DESCRIPTIONS
VAL2TABLE	: VAL2 FIELD DESCRIPTIONS
REF1TABLE	: REF1 FIELD DESCRIPTIONS
REF2TABLE	: REF2 FIELD DESCRIPTION
.ENDM	: END OF INIT MACRO

:: MACRO TO DEFINE ONE FIELD OF THE OUTPUT LINE

:: \$CRFFIELD BIT\_MASK,FAO\_STRING,FIELD\_WIDTH,SET\_CLEAR

:: WHERE:

DEF

BIT\_MASK=MASK OF BITS INDICATING THIS OUTPUT DESCRIPTION HOLDS  
FAO\_STRING=FAO CONTROL STRING FOR THIS FIELD  
FIELD\_WIDTH=MAXIMUM SIZE OF THIS OUTPUT LINE FIELD  
SET\_CLEAR=INDICATOR HOW TO TEST MASK BITS, I.E. ONE OF THE FOLLOWING:  
    SET=MASK BITS ARE TO BE TESTED AS SET  
    CLEAR=MASK BITS ARE TO BE TESTED AS CLEAR

```

.MACRO SCRFFIELD BIT_MASK=0,FAO_STRING,FIELD_WIDTH,SET_CLEAR
  .SAVE : REMEMBER USER'S PSECT
  .PSECT $SCRFSTRNG,RD,WRT,REL,NOEXE,NOSH
  .:
  .ASCII \FAO_STRING\ : ADDRESS OF FAO CONTROL STRING
  .:
  .RESTORE : OUTPUT FIELD CONTROL STRING
  .WORD BIT_MASK!^X8000 : INDICATOR FOR LENGTH
  .:
  .IF IDN <SET_CLEAR>,<CLEAR> : RESTORE USER'S PSECT
  .BYTE 0 : RECORD MASK BITS
  .IFF : DETERMINE WHETHER
  .BYTE 1 : MASK IS TO BE CLEAR
  .ENDC : OR IF
  .: : MASK IS TO BE SET
  .:
  .BYTE FIELD_WIDTH : MAXIMUM SIZE OF FIELD
  .LONG $SSLNG2-$SSLNG1 : STRING DESCRIPTOR
  .LONG $SSLNG1 : FOR FAO CONTROL STRING
  .ENDM : END OF FIELD DESCRIPTION MACRO

```

## **MACRO TO INDICATE END OF OUTPUT LINE DESCRIPTION TABLE**

## SCRFFIELDEND

**WHERE :**

THERE ARE NO FORMAL PARAMETERS.

```
.MACRO SCRFFIELDEND ;  
.WORD 0 ; END FIELD DESCRIPTIONS  
.ENDM ; END OF MACRO
```

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